

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of

Uwe HORN et al.

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Group:

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Examiner:

For: METHOD AND SYSTEM FOR CONTROLLING A PROCESSING OF VIDEO DATA

February 12, 2001

Assistant Commissioner for Patents  
Washington, DC 20231

**PRELIMINARY AMENDMENT**

Sir:

In order to place the above-identified application in better condition for examination, please amend the application as follows:

**IN THE CLAIMS:**

Please substitute the following amended claims 1-6 and 16-27 for corresponding claims 1-33 previously presented. A copy of the amended claims showing current revisions is attached.

1. (*Amended*) A method for controlling a processing of video data such that said video data may be transmitted over a connection in a communication network, said connection employing a plurality of protocol layers, said method including:

performing said controlling of the processing of video data at a first layer,  
acquiring a value of one or more transmission condition parameters indicative of transmission conditions in the network, where said one or more transmission condition parameters are specific for a second layer provided lower than said first layer,

deriving one or more values of one or more video control parameters usable at said first layer from said value of said at least one transmission condition parameter, and

performing said controlling of the processing of video data in accordance with said derived one or more values.

2. *(Amended)* The method of claim 1, wherein said connection comprises a predetermined link and said one or more transmission condition parameters relate to a condition of said predetermined link.

3. *(Amended)* The method of claim 2, wherein said one or more values of said one or more transmission condition parameters are acquired at said second layer on a sending side of said predetermined link.

4. *(Amended)* The method of claim 2, wherein said predetermined link is a radio link.

5. *(Amended)* The method of claim 1, wherein said first layer is an application layer and said second layer is a link layer.

6. *(Amended)* The method of claim 1, wherein said communication network is a wireless communication network, and said method is applied to the processing of video data in one or more of a mobile station in said wireless communication network, a base station in said wireless communication network, an interworking function between said wireless communication network and a fixed network, a terminal device in said fixed network, and a proxy server (50) provided in said wireless communication network or said fixed network.

16. *(Amended)* A transmitting system for transmitting video data over a connection in a communication network that employs a plurality of protocol layers, comprising:

a processing element arranged to process video data to be transmitted at a first layer,  
an acquisition element arranged to acquire a value of one or more transmission condition parameters indicative of a transmission condition associated with said connection, said one or more transmission condition parameters being specific for a second layer lower than said first layer, and

an element for deriving one or more values of one or more video control parameters usable by said processing element at said first layer from said value of said one or more transmission condition parameters,

where said processing element is arranged to control the processing of video data in accordance with said derived one or more values.

17. *(Amended)* The transmitting system according to claim 16, wherein said acquisition element is a part of a control element provided for controlling the transmission of data over a predetermined link forming part of said connection, where said one or more transmission condition parameters are indicative of a transmission condition associated with said predetermined link.

18. *(Amended)* The transmitting system according to claim 16, wherein said predetermined link is a radio link.

19. *(Amended)* The transmitting system of claim 18, wherein said acquisition element is arranged such that said one or more values of said one or more transmission condition parameters are acquired at said second layer on a sending side of said radio link.

20. *(Amended)* The transmitting system of claim 16, wherein said first layer is an application layer and said second layer is a link layer.

21. *(Amended)* The transmitting system of claim 16, wherein said communication network is a wireless network, and said processing element is provided in one or more of a mobile station in said wireless network, a base station in said wireless network, an interworking function between said wireless network and a fixed network, a terminal device in said fixed network, and a proxy server provided in said wireless network or said fixed network.

22. *(Amended)* The transmitting system of claim 21, wherein said processing element, said acquisition element and said element for deriving values of video control parameters are all provided in one unit.

23. (*Amended*) The transmitting system of claim 21, wherein said acquisition element is provided in a different unit than said processing element.

24. (*Amended*) The transmitting system of claim 23, wherein said processing element is provided in one of a terminal device of said fixed network and a proxy server, and said acquiring element is provided in a base station of said wireless network.

25. (*Amended*) The transmitting system of claim 16, wherein said processing element is arranged to perform coding or transcoding of said video data.

26. (*Amended*) The transmitting system of claim 16, wherein said processing element is arranged to perform forward error correction of said video data.

27. (*Amended*) The transmitting system of claim 16, wherein said processing element is arranged to perform packetization of said video data.

**REMARKS**

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached pages A-1 to A-4 are captioned "**Version With**  
**Markings To Show Changes Made.**"

Prompt and favorable consideration on the merits is respectfully requested.

Respectfully submitted,

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## VERSION WITH MARKINGS TO SHOW CHANGES MADE

1. *(Amended)* A method for controlling a processing of video data such that said video data may be transmitted over a connection in a communication network [(I,II)], said connection employing a plurality of protocol layers [(L1, L2; AL, NL/TL, LL)], said method including:

performing said controlling of the processing of video data at a first layer [(L1; AL)],  
acquiring a value of one or more transmission condition parameters indicative of transmission conditions in the network [(I, II)], where said one or more transmission condition parameters are specific for a second layer [(L2; NL/TL, LL)] provided lower than said first layer [(L1; AL)],

deriving one or more values of one or more video control parameters usable at said first layer [(L1; AL)] from said value of said at least one transmission condition parameter, and

performing said controlling of the processing of video data in accordance with said derived one or more values.

2. *(Amended)* The method of claim 1, wherein said connection comprises a predetermined link [(100, 200, 300; 79; 2223)] and said one or more transmission condition parameters relate to a condition of said predetermined link.

3. *(Amended)* The method of claim 2, wherein said one or more values of said one or more transmission condition parameters are acquired at said second layer on a sending side of said predetermined link [(100, 200, 300; 79; 2223)].

4. *(Amended)* The method of claim 2, wherein said predetermined link [(100, 200, 300; 79; 2223)] is a radio link [(79; 2223)].

5. *(Amended)* The method of claim 1, wherein said first layer [(L1; AL)] is an application layer [(AL)] and said second layer [(L2; NL/TL, LL)] is a link layer [(LL)].

6. (*Amended*) The method of claim 1, wherein said communication network [(I, II)] is a wireless communication network [(I)], and said method is applied to the processing of video data in one or more of a mobile station in said wireless communication network, a base station in said wireless communication network, an interworking function between said wireless communication network and a fixed network, a terminal device in said fixed network, and a proxy server (50) provided in said wireless communication network or said fixed network.

16. (*Amended*) A transmitting system [(A, B)] for transmitting video data over a connection in a communication network [(I, II)] that employs a plurality of protocol layers [(L1, L2; AL, NL/TL, LL)], comprising:

a processing element [(1; 2)] arranged to process video data to be transmitted at a first layer,

an acquisition element [(7, 22; 9, 23)] arranged to acquire a value of one or more transmission condition parameters indicative of a transmission condition associated with said connection, said one or more transmission condition parameters being specific for a second layer [(L2; NL/TL, LL)] lower than said first layer [(L1; AL)], and

an element for deriving one or more values of one or more video control parameters usable by said processing element [(1; 2)] at said first layer [(L1; AL)] from said value of said one or more transmission condition parameters,

where said processing element [(1; 2)] is arranged to control the processing of video data in accordance with said derived one or more values.

17. (*Amended*) The transmitting system according to claim 16, wherein said acquisition element [(7, 22; 9, 23)] is a part of a control element provided for controlling the transmission of data over a predetermined link [(100, 200, 300; 79; 2223)] forming part of said connection, where said one or more transmission condition parameters are indicative of a transmission condition associated with said predetermined link [(100, 200, 300, 79; 2223)].

18. (*Amended*) The transmitting system according to claim 16, wherein said predetermined link [(100, 200, 300, 79; 2223)] is a radio link [(79; 2223)].

19. (*Amended*) The transmitting system of claim 18, wherein said acquisition element [(7; 22; 9; 23)] is arranged such that said one or more values of said one or more transmission condition parameters are acquired at said second layer [(L2; LL)] on a sending side of said radio link.

20. (*Amended*) The transmitting system of claim 16 [one of claims 16 to 19], wherein said first layer [(L1; AL)] is an application layer [(AL)] and said second layer [(L2; NL/TL, LL)] is a link layer [(LL)].

21. (*Amended*) The transmitting system claim 16, wherein said communication network [(I, II)] is a wireless network [(I)], and said processing element [(1; 2)] is provided in one or more of a mobile station in said wireless network [(I)], a base station [(BSC)] in said wireless network [(I)], an interworking function [(IWF)] between said wireless network [(I)] and a fixed network [(II)], a terminal device [(B)] in said fixed network [(II)], and a proxy server [(50)] provided in said wireless network [(I)] or said fixed network [(II)].

22. (*Amended*) The transmitting system of claim 21, wherein said processing element, said acquisition element and said element for deriving values of video control parameters are all provided in one unit [(A, BSC)].

23. (*Amended*) The transmitting system of claim 21, wherein said acquisition element [(7; 22; 9; 23)] is provided in a different unit than said processing element [(1; 2; 14; 15)].

24. (*Amended*) The transmitting system of claim 23, wherein said processing element [(2; 15)] is provided in one of a terminal device [(B)] of said fixed network [(II)] and a proxy server [(50)], and said acquiring element [(9)] is provided in a base station [(BSC)] of said wireless network [(I)].

25. (*Amended*) The transmitting system of claim 16, wherein said processing element [(1; 2)] is arranged to perform coding or transcoding of said video data.

26. (*Amended*) The transmitting system of claim 16, wherein said processing element [(1; 2)] is arranged to perform forward error correction of said video data.

27. (*Amended*) The transmitting system of claim 16, wherein said processing element [(1; 2)] is arranged to perform packetization of said video data.